Resources and Tools for the Classroom

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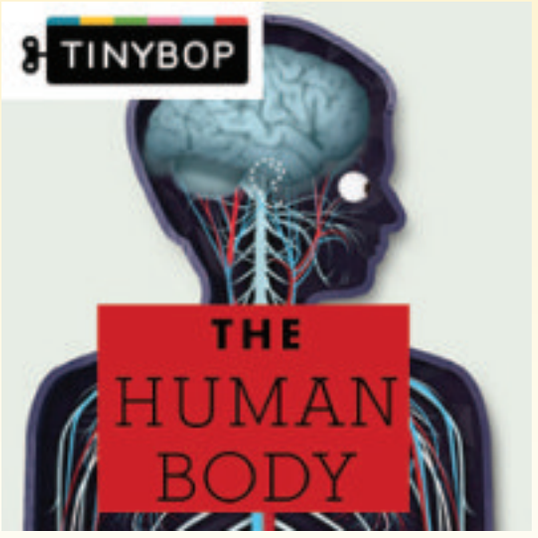
APPS



THE HUMAN BODY from Tinybop is an engaging and entertaining educational app that introduces the body systems to children including both senses and organs. Through a highly-visual, interactive interface, students are encouraged to explore information about the nervous, skeletal, respiratory, circulatory, digestive, muscular, urogenital, and immune systems. Although no verbal or written instructions are provided, users will quickly figure out that tapping, dragging, and swiping icons will provide information and start animations. For instance, tapping the mosquito sends it flying across the screen causing a bite that sends a signal to the brain. Dragging flowers to the nose shows how the olfactory bulb in the brain is stimulated.

Students will enjoy exploring the many animated layers and close-ups.

Many students have difficulty correctly labelling diagrams of the human body. This app provides a fun way to practice anatomy vocabulary. Students drag the labels related to a particular body system onto the model and are provided with audio reinforcement.

This app is chuck-full of extras that are easily missed, so students should be encouraged to tap and swipe all over the screen. For instance, swiping the heart side to side reveals a cross-section showing inside the heart. Clicking the parts of the brain reveals visuals associated with their functions. Dragging a leg demonstrates how the Achilles tendon works.

The app allows an adult to establish a separate account for each user. A detailed settings area allows users to choose from dozens of languages, select an avatar, and control sound and visual elements.

Excellent for both library and classroom tablets, this app is likely to be popular with elementary science teachers, parents, and science savvy kids.

It's easy to miss the outstanding, detailed handbook. An introduction is provided to each body system along with explanations of the icons and interactive elements available in that section of the app. Discussion questions are provided to jumpstart a conversation about the body system. To download the handbook, go to http://tinybop.com/handbooks.

To extend the experience, join Tinybop's social media content.

To learn more, go to http://tinybop.com/apps/the-human-body.

The **MATHCUBES** apps from SchoolCubes are a fun and motivating way for children to practice their basic math skills.

Both the ADDITION & SUBTRACTION FOR KIDS and TIMES TABLES FOR KIDS use similar formats. In each case, an adult sets up the app based on the problem presentation approach for the particular region of the world. Both visual and auditory cues introduce and provide feedback for each problem. Multiple languages are available.

Mathcubes uses a well-researched correction system designed to help children succeed. The app constantly checks student answers and adapts to meet the child's needs. Assistance is provided for those needing help and more challenging exercises are presented for those ready for more complicated problems.

A built-in rewards system motivates students to reach new levels. The positive reinforcement woven through the system provides learning support that keeps children coming back for more.

The simple touch-screen design, appealing visual support, large animated numbers, and useful audio support all contribute to the success of these quality apps. In addition, a soothing music component contributes to the environment rather than being distracting for users.

The MATHCUBES apps would be an excellent addition to primary grades library iPads. They would also be a great choice for those who supervise special needs students.

To learn more about the apps, go to http://www.schoolcubes.com. To access the apps, go to https://itunes.apple.com/us/artist/apps4needs/id864191082

UNIVERSAL ZOOM: ALL ABOUT SIZES AND DISTANCES is a fascinating app published by Gamify It. From tiny, subatomic particles to stars and galaxies, this easy-to-use tool allows students to compare two objects to get a sense for the scale of the universe.

Designed for ages 9-11, students can choose from 150 objects presented in scale. The dynamic layout provides users with a sense for the relative size of common objects. Students will enjoy guessing and discovering how many times one object fits inside another. A limited audio element introduces each object encouraging users to read more about each object.

Measurements are available in both standard and meter systems making this an excellent tool for mathematics activities that involve using both units of length. This tool is also effective for a practical exploration of simple and scientific notation. The scale range is 1 yoctometer (1x10-24m) to 93 billion light years (8.8x10=26m)!

This engaging app encourages students to explore the idea of size and scale in a meaningful way. The high-quality images and rich content make this an app that is both appealing and useful for many STEM classroom applications.

To download the app, go to https://itunes.apple.com/.../universal-zoom-all-a.../id807673066.

MAGNETRY: EXPRESS YOURSELF by Gebo Kanois is an app that encourages creativity, playing with words, and writing poetry. This powerful and easy-to-use tool has endless possibilities across the curriculum.

Students begin by starting a "new collection" and a "new book" containing 16 pages. After choosing a page, users are able to select from eight different categories. Words are randomly generated to get the page started. When a word is clicked, users see usage options and have the opportunity to select a variation of the word. Students can reorganize these words, add words, or delete words. In addition, stickers, backgrounds, and paint tools can be used to enhance to expression. Projects can be saved, shared on social media, and printed.

The Help section provides tools to add, remove, or rename a collection, as well as start or save a new page. The app also allows users to move, customize, delete, and add words, backgrounds, and stickers.

Although many "magnet poetry" apps exist, this one is exceptional. Magnetron's versatility and user-friendly features make it an excellent resource for library tablets and iPads.

To download it for the iPad, go to https://itunes.apple.com/.../magnetry-express-you.../id846619946.

A publisher provided copy was used for the review.

THE WIRED BUNCH from nine-22media is a rip-roaring western e-book series infused with interactive technology. Blending the best of old westerns and classic cartoons with engaging robots and fun animation, this series will be a hit with kids.

Six issues of this popular interactive e-book series have been published so far and six more are under development. The first issue is free, while other issues need to be purchased. The app opens to a bookshelf showing the issues currently available.

Set in an alternative Old West setting, each story revolves around robot cowboys. In the first exciting episode, Marshal Ram and his deputies are introduced to readers. These Old West bots must protect their town from O.L. Tycoon and his evil robots. Children can read the story, listen to the story read aloud, or a combination. At any point, readers can go to a particular page, set a bookmark, or edit the story.

The old-time piano music along with the engaging animation immediately immerse children in the world of the wired bunch! Each e-page is visually stunning with crisp bright colors. Basic animation adds to the experience without distracting from the story. The bright yellow font is presented in a size that is easy to read. The audio narra-

tion fits perfectly with the western theme. Throughout the story, readers are encouraged to participate by exploring the screen or answering a reflective question. These interactions relate directly to the story so they enhance the reading experience.

Like the Saturday Morning cartoons of the past, some of the technology references and sophisticated humor may be "over the heads" of some children. However, parents, teachers, and librarians will enjoy every play on words making the books a wonderful joint reading experience.

This interactive e-book series would be a wonderful way to engage reluctant readers both inside and outside the classroom. Children will read these engaging stories over and over again.

The **MIDDLE SCHOOL SCIENCE** apps bundle from Sprout Labs take an innovative approach to science instruction by allowing users to select a learning style that best fits their interests and needs.

The Middle School Science bundle includes six apps including Forms of Energy, Electricity/Magnetism, Forces in Motion, Light/Sound, Heat, and Elements. Each app is divided into two or three sections exploring key concepts related to the topic.

For each section, students can select from five different approaches. However, the content varies slightly from section to section, so students can easily miss things if they only complete one section.

"Read and Learn" presents users with text featuring key concepts. An option is provided for audio narration. This section would be more effective if the paragraphs of text were placed on separate pages rather than a long scrolling text box. Headings and subheadings would also be helpful. Across the bottom of the screen, trivia and other facts are presented in a "Did You Know?" area.

"Touch and Learn" provides images with hotspots that students can click for text or a video. The hotspots are easy to see so students won't miss important ideas. However in many cases, content from slide to slide doesn't flow smoothly as a narrative.

"See and Learn" features high-quality images with descriptive text. Although interesting, this section only provides a surface level exploration of the topic.

"Watch and Learn" display educational videos. These are the same videos used in the Touch and Learn section.

"Quiz and Learn" challenges users to answer multiple choice questions with increasing difficulty.

The apps would be useful as a supplement rather than as a replacement for the textbook and classroom instruction. They would also be useful for special needs students. Although the content is displayed in an interesting way, it lacks the breadth and depth necessary for middle school science students. It would be helpful to provide a clickable glossary to help youth review key terms.

While the audio narration is a useful element, the sound effects and short music clips distract rather than contribute to the content. Happily, these sounds can easily be turned off.

To purchase the apps, go to https://itunes.apple.com/.../arti.../sprout-labs-llc/id846475860

The **SMITHSONIAN NATIONAL ZOOLOGICAL PARK** website is a fun way to learn about animals and science. Start your website exploration with the "Zoo News". These press releases contain text, images, and sometimes video associated with a news item such as the birth of an animal or a new scientific discovery. They're great for informational reading or for current events activities.

The "Meet Our Animals" section of the website is likely to be the most popular area with children. The Animal Index provides images and in some cases information about hundreds of mammals, birds, reptiles, amphibians, and fish in the collection. If you can't visit the zoo in person, you can still enjoy the animals live on the zoo cams. In addition, users can explore groups of animals and exhibits. Many of these pages contain information and activities. The "National Zoo E-Cards" page provides access to animal images and the opportunity to write a message and send it through email.

The "Science" section of the website explores the conservation activities of the zoo. These research initiatives, laboratories, and centers are a great way for youth to learn about the scientists who work behind-the-scenes at the zoo and in the field. These projects would be an effective way to jump-start student science projects.

The "Conservation Central" online habitat education program is a fun way for youth to learn about the animals of temperate forest habitats. This section includes curriculum materials along with online interactives.

The "Smithsonian Biodiversity Science in the Classroom" materials provide videos and lessons plans for upper elementary students.

The website is available at http://nationalzoo.si.edu. To extend the experience, be sure to check out their social media presence including Facebook, Twitter, Flickr, YouTube, and Instagram sites to keep up on the latest news and information about the zoo and its animals.

In addition to the website, an app is available from both the App Store and

Google Play at http://nationalzoo.si.edu/SmithsonianNationalZooApp/. While the app includes features such as an interactive map and schedules for zoo visitors, it also provides lots of useful information such as an animal index and live animal cams for those not able to visit in person.

DISTRACTION at http://www.distraction.gov/ focuses on reducing accidents caused by distracted drivers. Sponsored by the National Highway Traffic Safety Administration and the U.S. Department of Transportation, the website provides resources for learning about distracted driving.

The "Get the Facts" section of the website highlights facts and statistics, research, state laws, and FAQs about this important topic. These pages would be excellent for nonfiction reading experiences focusing on reading comprehension and information inquiry. For instance, ask students to compare the laws in different states regarding texting and driving. Involve youth in creating infographics based on the information they find. Use these as part of a school-wide awareness campaign.

The "Get Involved" section provides resources for taking a pledge to not text and drive. It also contains lots of resources for educators and community members wishing to host a campaign. Finally, a teen section focuses on topics of specific interest to young adults including social media links.

The "Faces" section features testimonials of individuals whose lives have been impacted by distracted driving. The compelling stories are very persuasive.

Finally, the "DOT Action" section provides information about regulations, awareness, and enforcement. Like the "Get the Facts" section, this area would be an excellent informational reading source for student projects.

Be sure to check out the "Stop the Texts. Stop the Wrecks" campaign from the Ad Council. It contains public service announcement videos, facts, and tips. Go to http://www.stoptextsstopwrecks.org.

Whether heading out on Spring Break or prepping for a foreign exchange program, teens need to learn to be wise travelers. The **STUDENTS ABROAD** website from the U.S. Department of State provides essential information for smart travelers.

This comprehensive tool helps youth and their parents plan for both short and long trips abroad. The site is divided into useful sections.

The Travel Docs area of the website reviews important documents necessary for travel outside the United States.

The Health section explores information about specific countries as well as general tips about a healthy trip.

The Emergencies section features guidelines for a wide range of problems from health and crime concerns to evacuations and natural disaster preparation.

THE STEP (Smart Traveler Enrollment Program) is a free service that connects travelers with the U.S. Embassy near their travel location. There's also an Embassies section of the website where users can easily locate embassies around the world.

The Smart Travel section provides ideas to make travel a snap. From reviewing local laws to packing bags, it's full of useful tips.

Because so many students travel on Spring Break, an entire section is dedicated to planning for this type of travel.

The "To Go" section provides access to travel guides and useful, printable travel tools.

Finally, the website highlights travel warnings and alerts related to short and long-term events that may impact travel abroad.

The Student Abroad website provides a wealth of materials that can be use by librarians on bulletin boards and other types of library displays. Create a display featuring travel books along with key documents from the website.

You'll find the STUDENTS ABROAD website at http://travel.state.gov/content/studentsabroad/en.html.

FRONTIERS FOR YOUNG MINDS is an open-access, non-profit scientific journal aimed at youth ages 8-15. What makes this journal unique is that young people sit along side experts on the editorial board. As such, youth work directly with leading scientists to shape the cutting edge articles. Each article includes brief bios of both the authors and the reviewer(s).

The high-quality, scientific articles include age-appropriate text, figures and references. These papers would provide great models for librarians partnering with language arts and science teachers on STEM research activities.

Articles are published in four areas including Neuroscience, Earth and its Resources, Astronomy and Space Science, and Health. Both core concept articles focusing on the fundamentals of the field as well as articles exploring new discoveries are published. Website users can select articles from one of the four sections or do a key word search.

The People section of the website provides contact information where you can get your students involved in hosting an article review.

The open access articles are freely available. Articles can be downloaded in the PDF format for easy sharing and printing. They can also be shared through popular social networks.

Frontiers for Young Minds also maintains a blog at Scientific American. This blog is an excellent way to introduce youth to the value of blogs and social media in the sciences. Go to http://blogs.scientificamerican.com/frontiers-for-young-mi.../.

To learn more about this exciting scientific journal for youth, go tohttp://kids.frontiersin.org/

Feature the **WHITEHOUSE** website at http://www.whitehouse.gov as part of your President's Day activities. The Whitehouse website is organized into five major sections that are easy to access and use.

The Briefing Room section features timely information about the President's activities and public statements. Think about ways that proclamations and executive orders could be integrated into informational reading activities related to language arts and social studies.

The Issues section examines key issues facing the nation and plans for addressing these challenges. Economy, education, energy and the environment, immigration, and health care are a few of the hot topics addressed. This page would be an excellent way to kick off information inquiry projects that make use of contemporary primary source documents.

The Administration section highlights the key people in the Obama-Biden administration. It also includes information about the Offices of the White House and current initiatives such as Let's Move!

The Participate section encourages the public to participate in White House activities including Google+ Hangouts known as We the Geeks. Follow the Whitehouse on social media including Twitter, Facebook, YouTube, Flickr and others. This is an excellent activity to promote digital citizenship in your library.

The 1600 Penn section is a content-rich resource for learning about the US government, the Whitehouse, and the presidency. Of particular note is the excellent database of American Presidents at http://www.whitehouse.gov/about/presidents.

To learn more, go to the Whitehouse website at http://www.whitehouse.gov/.

TWEENTRIBUNE from the Smithsonian Institution is a newly launched website focusing on news and information for K-12 students. The project is designed so that teachers can make reading assignments and involve youth in posting public or private comments. Free teacher accounts allow educators to create 9 classrooms and manage student accounts for each classroom.

The home page contains chronological access to the latest article postings. Each article contains a photo, caption, short article, and critical thinking challenge. The Lexile reading level can be selected, a comment can be added, an option is provided to assign the article to students, and a quiz link is also provided.

One of the most useful aspects of the site is the ability to choose the Lexile level for a reading assignment. While each article contains a default Lexile such as 900L, the article may also be displayed as 680L, 1090, or 1310L. A master list of articles can be listed by Lexile levels from 500L to 1600L. Teachers can also explore articles by topic such as animals, art, entertainment, fashion, and science.

In addition to the articles, a Photo of the Day area is designed for youth to write their own captions to match interesting photos.

Teachers can assign an article for a particular classroom and add a message. For instance, they might ask students to address a question using the comment feature. Quiz questions can also be assigned and student results recorded.

Common Core aligned lesson ideas are available that help connect the informational reading experience to practical assignments.

The TTJunior and TTTeens sections present articles of particular interest to younger and older youth. The TTEspanol section is still under development.

School librarians can partner with teachers to build an exciting informational reading experience across content areas. Consider a school-wide approach that involves students in reading and discussing current events.

To get started, go to http://tweentribune.com/

To visit TTJunior, go to http://tweentribune.com/junior

To visit TTTeens, go to http://tweentribune.com/teen

To visit TTEspanol, go to http://tweentribune.com/spanish

To visit the Lessons, go to http://tweentribune.com/lessonplans.